

ABSTRACT OF THE DISCLOSURE

There is provided a honeycomb structural body with a high cell density of 600 cells/in² or greater and excellent catalyst loading properties. In a honeycomb structural body comprising a plurality of cells formed by providing partition walls composed mainly of cordierite, which has the chemical composition SiO₂: 45-55 wt%, Al₂O₃: 33-42%, MgO: 12-18 wt%, in a honeycomb fashion, the density of the cells is at least 600 cells/in² and the pore volume of the partition walls is at least 30%.